

PLAT DRAFTING

Four example plats are included at the end of this chapter. These plats depict current standards and practices as required by District One, except in the area of Utility identification. See Chapter 9 of the WISDOT Guide To Utility Coordination for examples of how to identify Utility ownership and interests on a Right of Way plat. Please use these example R/W plats and the WISDOT Guide To Utility Coordination as resources for implementing these District One requirements.

DISTRICT ONE PLAT POLICY – SEPTEMBER 2002

The Facilities Development Manual (FDM) lists the minimum requirements for preparation of Right of Way plats in Procedure 12-15-1. The Real Estate staff at District 1 - DOT has determined that additional information above and beyond the minimum requirements must be shown on the detail sheets of plats to permit a comprehensive, fair and equitable appraisal to be completed for each parcel.

The figures located in Procedure 12-15-1 display examples of the proper way to show some of the required information on a plat. Sample copies of individual sheets or complete plats can be obtained, if requested, from the District 1 office for use as examples of plat preparation procedures.

The following list of policy requirements for District 1 overrides the Facilities Development Manual in these areas.

1. A minimum band of topography 500 feet wide in rural areas and 200 feet wide or the depth of one row of lots, whichever is greater, in urban areas on each side of the reference line shall be shown on all plats using aerial based planimetric mapping developed on CADDs.

Conventionally drawn board drafted plats shall include the minimum topography required by the FDM (200' on each side) plus additional topographic features visible on aerial mosaic and required for appraisal purposes.

2. The following topographic features shall be shown on all plats:
 - a. All fence lines.
 - b. Septic tanks, mound systems, drain fields and vent pipes.
 - c. Driveways and field entrances.
 - d. Existing Roadways (edges of pavement); the centerline generally is unnecessary unless the centerline is the same as the new reference line.
 - e. Wells, cisterns, and underground tanks.

DISTRICT ONE PLAT POLICY – SEPTEMBER 2002 - continued

- f. All utilities, both overhead and underground such as power poles, telephone poles, buried electric cables and telephone cables, cable TV, gas, water and sanitary sewer. All utilities are to be marked using standard symbols as shown in the FDM, Procedure 15-5-30 and identified as to who owns them.

A separate utility plan may be prepared to avoid showing all utilities within the existing right of way on the plat in an effort to reduce clutter and result in a clearer plat. The compensable utilities located in the new acquisition areas still need to be shown on the R/W plat. The separate utility plan, if used, must contain the reference line, existing R/W, new R/W line with pluses and distances out, all existing utilities both overhead and underground, slope intercepts, utility easements, and the proposed work. This separate utility plan will not be a part of the R/W plat but must be furnished at the same time as the plat. If this option is elected, the utility plan shall be in the standard detail sheet format.

- g. Existing signs.
 - h. Foundations, ruins, steps, walls, etc.
 - i. Buildings.
- 3. All ornamental shrubs and trees shall be shown on the plat. Show the edge of wooded areas and isolated single trees along yards, driveways and orchards.
 - 4. Show a dimension to the near building of a group of buildings and to single buildings within 50 feet of the new R/W line, in areas of acquisition, to take zoning ordinances into account when making appraisals.
 - 5. Property owners' names of all lands are to be shown on all detail sheets. Parcel numbers are to be shown on any detail sheets where an interest is required.
 - 6. The name of the local governmental unit, in which the area depicted on the detail sheet is located, shall be shown; such as Town of _____, Village of _____, or City of _____.
 - 7. Show the quarter-quarters of sections and government lots for all detail sheets as displayed on Figure 6 of Procedure 12-15-1 in the FDM.
 - 8. Use chords rather than arcs to define the new R/W line, in areas of acquisition, even if the construction reference line is on curve.
 - 9. The distance and bearing from one government survey monument to the next one, along the direction of the reference line, shall be shown with a dashed line on the detail sheets, when the reference line and landlines are close together.

DISTRICT ONE PLAT POLICY – SEPTEMBER 2002 - continued

10. A note shall be assigned to every R.E. plat stating the basis for establishing the existing highway right of way. The note shall take the form of a single notation on the title sheet if all existing right of way is established from a single reference source. If more than one source is utilized, there shall be a note on the title sheet and all detail sheets explaining the various sources.

Three points of reference were normally used in the past for referencing existing highway right of way. The following depicts notes that are to be placed on the title sheet and, if required, on the detail sheets.

Title sheet - multiple sources:

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE AS SPECIFIED ON EACH PLAT DETAIL SHEET: GOVERNMENTAL LAND LINE, PREVIOUS PROJECT REFERENCE LINE OR CENTERLINE OF EXISTING PAVEMENT, as noted (use only those sources that are applicable).

Title sheet - single source:

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON XXX.

Detail sheet - multiple sources:

EXISTING HIGHWAY R/W ESTABLISHED FROM GOVERNMENTAL LAND LINE.

Or

EXISTING HIGHWAY R/W ESTABLISHED FROM PREVIOUS PROJECT XXX REFERENCE LINE.

Or

EXISTING HIGHWAY R/W ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENT.

Or

A combination thereof followed by, AS NOTED. The limits of each reference source are to be noted adjacent to the right of way taking when multiple references occur on a sheet. If the entire sheet is based on one reference, then the one source note is the only requirement.

11. Show small parcels on the R/W plat layout sheets, even though they may have been shown in their entirety on the detail sheets, except for those in urban areas - lots, etc. In the latter case parcel numbers may be omitted. A layout sheet is not required on urban projects.
12. Use common symbol, small circles, for all T.I.'s throughout the plat. See the sample plats.

ADDITIONAL DISTRICT ONE REQUIREMENTS

All mapping must be ordered and supplied through the district and not from Technical Services directly. Mapping which is loaded on tape for use in creating an electronic Real Estate plat uses the Wisconsin County Coordinate System, thus they are not to be converted from grid plane to ground.

Plat sheet files must not be rotated from their original position on the Cartesian plane. The integrity of the grid plane orientation and subsequent coordinate values must be maintained for future revisions on CADDs.

Leave every fifth parcel blank on the Schedule of Lands & Interests Required as shown on the example plat.

Legal descriptions on consultant projects will be reviewed and accepted by Real Estate prior to the signing of the plat.

Plat detail sheets need a DEPARTMENT supplied date in the title block prior to hard copy printing and electronic tape transmittal to the DEPARTMENT. Once the plat is completed the consultant shall submit a paper print of the plat along with the original Title sheet. Once the Title sheet has been signed and dated by the applicable District Design Chief, the District project manager will notify the consultant of the date to be placed on the detail sheets. Once the sheets have been correctly dated the consultant will submit the originals to the District, and a D-size original to be used for filing the plat with the County clerk's office.

CADD sheet cells, with applicable edit fields, are available to consultants.

No adhesive backed product is to be used on the final plat hard copy submitted to the DEPARTMENT.

The DEPARTMENT will provide the CONSULTANT various cell libraries depicting topographic features, text sizes and styles, line patterning, and standard sheet cells. The information will be available only in the DEPARTMENT'S .DGN format. Contact Bernie Gehrmann, (608) 246-3847, for specific information.

If work under this contract includes board and/or CADDs drafting on plans, then the form and standards would be as directed by the DEPARTMENT with samples provided to the CONSULTANT.

Contact the District One CADD/Drafting Unit for additional information.

DISTRICT PLAT POLICY FOR ADVERTISING SIGNS

There are four types of advertising signs:

- 1) Encroaching signs located within the existing right of way.
- 2) Signs located within areas of right of way to be acquired.
- 3) Signs located within areas to have a temporary interest (T.I.) obtained under the project.
- 4) Signs located partially on any of the above 3 cases.

These signs are to be identified by a number; they are to be clearly labeled and the names of the sign owners are to be provided in a table on each R/W plat detail sheet containing signs.

The sign numbers are to be assigned as a two part number based on the parcel number the sign is situated on and a sequence number, such as 29-1, 29-2. If the sign is located in the existing R/W, label it as E, for encroaching, such as E-1, E-2 sequentially on each sheet. The number is to be located in a clearly visible uncluttered spot on the sheet with a leader line to the actual sign location. The sign number is to be placed within a hexagon for easy identification.

The small table should also be placed in a relatively uncluttered area of each detail sheet, preferably at the bottom of the sheet, just left of center (see sample plat). If this area is not clear on a sheet, move the table to any other relatively open space on the left half of the sheet. The sign number and the owners name both need to appear in the table.

Example Plat 1693-03-00 depicts the correct way to graphically represent advertising sign information.

District One Policy for Y & X Coordinates and Significant Decimals on Plats

- Show all coordinates of points to nearest 0.001 foot, distances to nearest 0.01 foot, and bearings to nearest second.
- The following disclaimer should be shown on all plats regardless of whether the coordinate values are shown to the nearest 0.01 or 0.001 of a foot.

Inversing between coordinates, in close proximity with each other, may not replicate the bearings and distances shown on this plat.

- When “Y” and “X” coordinate values are shown, the “Y” should be shown to the left of, or above, the “X” value of the point.
- List “Y” before “X” on all plat sheets, including tables.
- Coordinate values are listed by some districts to nearest 0.01 foot and by some to nearest 0.001 foot. The bearing computed from point coordinates with only two decimal digits sometimes differs “greatly” (e.g., by 20”) from the bearing shown on the plat for short lines. Using three decimal digits would reduce the bearing differences. The “great” difference is perceived by some as an inaccuracy which could be made less apparent by showing point coordinates to three decimal places.
- Be consistent on plats by showing coordinates of all points with the same number of decimal digits.
- This significant-digit guidance applies to all coordinate systems, including the Wisconsin County Coordinate System, the Wisconsin State Plane Coordinate System, and ground distances calculated from Wisconsin State Plane Coordinate System grid lengths.

Plat preparers and plat users should understand that bearings and distances computed from coordinates rounded to two decimal places most likely will not agree exactly with the bearings and distances shown on the plat. The reason for this is that the bearings and distances shown were most likely computed from unrounded coordinate values using more than two decimal places. Bearings and distances computed from coordinates rounded to three decimal places will indicate values closer to those shown, however, again they will most likely not agree exactly with the bearings and distances shown on the plats because they were computed using a greater number of decimal places.

THE FOLLOWING PAGES PROVIDE GUIDELINES FOR ENSURING THE CORRECT GRAPHIC CONTENT IS DEPICTED ON THE R/W PLATS FOR DISTRICT ONE. INFORMATION INCLUDED IS:

Page 7-8 thru 7-10	CADDS INFORMATION CHART FOR LEVELS & LINES
Page 7-11 thru 7-13	CADDS DATA LEVELS
Page 7-14	NOTES TO BE SHOWN ON THE TITLE SHEET
Page 7-15	CONVENTIONAL SIGNS AND ABBREVIATIONS
Pages 7-16 thru 7-21	CHECKLIST FOR PLAT DRAFTING
Pages 7-22 thru 7-27	PLAT/CADDS SPECIAL PROVISIONS
Pages 7-28	EXAMPLE PLATS

CADD INFORMATION CHART FOR LEVELS & LINES

	DESCRIPTION	LEVEL	LINE WEIGHT	LINE CODE	LINEAR PATTERN	LINE SYMBOLLOGY
PLAN AND/OR PLAT	1/16 LINE	27	1		AP=16THL	---
	1/4 LINE	27	2		AP=QRTL	---
	SECTION LINE	27	3		AP=SECL	---
	TOWN/RANGE/TOWNSHIP LINE	27	3		AP=TNSHPL	---
	COUNTY LINE	23	4		AP=CNTRYL	---
	STATE LINE	23	6		AP=STATEL	---
						(MODIFIED 1/4 LINE)
						(MODIFIED SECTION LINE)
	EXISTING DRIVEWAYS, BEAMGUARD & SIDEWALKS	17	0	LC=2		---
	TRANSIT LINE	20	0	LC=0		---
	LOT/OUTLOT LINES	23	0	LC=3		---
	CURB & GUTTER	11	0 & 2	LC=3		---
	EXISTING ROAD LINES	11	1	LC=3		---
	PROPERTY LINE	23	1		AP=PL	---
	EXISTING R/W & EASEMENT LINES	23	1		AP=EXIST	---
PROFILE	H.E., P.L.E., T.I. & R.D.E. LINEWORK	25	1		AP=EXIST	---
	NEW R/W LINE	25	2	LC=0		---
	REFERENCE LINE	22	3	LC=0		---
						(SOLID)
	BUILDINGS	12	0	LC=0		---
	EXISTING STRUCTURES & CULVERTS	15	0	LC=2		---
	UNDERGROUND FACILITY	21	1			---
	RAILROAD	13	1		AP=RRPAT	---
	FENCES	15	1		AP=FENCE	---
						(SOLID)
	SLOPE INTERCEPTS	25	0	LC=2		---
	TIE LINES	26	0	LC=5		---
	MATCH LINES	25	6	LC=0		---
						(SOLID)
	PE'S, CULVERT AND PE PIPES	31	0	LC=0		---
PROFILE	BRIDGES - RURAL (SHELL)	28	1	LC=0		---
	NEW BRIDGES - URBAN (DETAILED), CURB AND GUTTER, SIDEWALKS, DRIVEWAYS AND PAVEMENT EDGE	29	1	LC=0		---
	EXPANSION JOINTS	35	2	LC=2		---
						(SOLID)
	EXISTING GROUND	39	0	LC=0		---
	EXISTING TRAVELWAY	39	2	LC=7		---
	SPECIAL DITCHES	41	1	LC=3		---
	REFERENCE LINE	41	3	LC=0		---
						(SOLID)
						(LONG SHORT DASH)

CADD INFORMATION CHART FOR LEVELS & TEXT

DESCRIPTION	LEVEL	LINE WEIGHT	LEROY GUIDE SIZE	FONT
BEGIN & END RELOCATION NOTES (PLAT)	27	3	200	5
COORDINATES	27	1	140	5
CORPORATE NAMES	23	3	200	5
1/4-1/4 DESIGNATIONS AND TOWN NAMES	27	3	200	5
BEGIN & END PROJECT NOTES (PLAN)	44	2	175	5
BEGIN & END CONSTRUCTION NOTES	44	1	140	5
MAIN R P.C., P.I. & P.T. NOTES, CURVE NOTES, INTERSECTION & EQUATION NOTATIONS	22	1	140	5
CORPORATE LIMITS	23	1	140	5
SUBDIVISION & BLOCK TITLE (DOTTED)	23	/	140	23
MATCH LINE LETTERING	25	1	140	5
SECTION CORNERS, PARCEL NUMBERS, EXISTING R/W DIMENSIONING NOTE & DEFINITIONS	27	1	140	5
BENCH MARK TABLE & BENCH MARKS	31	1	140	5
PROFILE: ELEVATIONS, ALIGNMENT SLOPES & VERTICAL CURVE NOTES	41	1	140	5
EXCEPTION TO NET CENTERLINE LENGTH, DATUMS, EQUATIONS & STATIONS	44	1	140	5
ROAD NAMES	23	1	100	5
P.O.B.	26	1	100	5
STRUCTURE ABBREVIATIONS/NAMES	12	0	100	5
T.P.'S, G.M.'S, ETC.	21	0	100	5
BEARINGS	22	1	100	5
PROPERTY OWNERS, LOT/OUTLOT NUMBERING & C.S.M. IDENTIFICATION	23	0	100	5
EXISTING R/W DIMENSIONING	23	0	100	5
SLOPE INTERCEPT NOTES	25	0	100	5
R/W METES & BOUNDS AND SECTION CORNER TIES	26	0	100	5
SECTION CORNER NOTES & T.I. /P.L.E. DENOTATION	27	0	100	5
LEADER LINES & NOTES	VARIABLE	0	100	5

CADD INFORMATION & TEXT SIZE CHART

NOTE: FINAL PRINTS OF THE R/W PLAT DETAIL SHEET(S) SHOULD BE CREATED IN THE FOLLOWING FASHION:
(OVERLAY - SOLID LINEWORK) CONTAINS ONLY THE INFORMATION ON LEVELS 21-28 AND 59;
(BASE - SCREENED LINEWORK) CONTAINS ONLY THE INFORMATION ON LEVELS 11-15, 17-19 AND
SOMETIMES LEVEL 16.

THE CADD INFORMATION CHART FOR LEVELS & LINES REPRESENT LINE WEIGHTS RELATIVE
TO BOARD DRAFTING.

THE HARD COPIES SHALL NOT BE ELECTROSTATIC.

CADD GENERATED PLATS SHOULD HAVE LINE WEIGHTS INCREASED BY 1(JUICED).

ON A 1"=100' SCALED PLAT, USE A PATTERN SCALE OF 1 ON A 1"=50' SCALED PLAT
USE A PATTERN SCALE OF 0.5.

LEROY GUIDE SIZE	CADD TEXT SIZE							
	SCALE							
	100		50		20			
	TH	TW	TH	TW	TH	TW	TH	TW
100	9	10	4.5	5	1.8	2		
120	10.8	12	5.4	6	2.16	2.4		
140	12.6	14	6.3	7	2.52	2.8		
175	15.75	17.5	7.88	8.75	3.15	3.5		
200	18	20	9	10	3.6	4		
350	31.5	35	15.75	17.5	6.3	7		

CADDS DATA LEVELS

Levels 1 - 19

Technical Services generated for planimetric mapping projects, subject to District generated additions.

Levels 20 - 63

District generated for planimetric mapping projects.

<u>PLOT USE</u>	<u>LEVEL</u>	<u>CONTENTS</u>
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	1	
	2	
	3	
Plan	4	
Plan	5	
Plan	6	
Plan	7	
Plan	8	
Plan	9	
Plan	10	
Plan/PLAT	11	Roads
Plan/PLAT	12	Buildings, Windmills, Towers, Wells, Gas pumps, Conc. slab, Ruins, Quarry
Plan/PLAT	13	Railroad tracks, Railroad signals, Runway
Plan/PLAT	14	Utility poles, Signs, Light poles, Signal box, Transmission towers
Plan/PLAT	15	Structures, Culverts, Fences, Retaining walls
Plan/PLAT	16	Manholes, Valves, F.H., Inlets, S.D. = Storm Drains

<u>PLOT USE</u>	<u>LEVEL</u>	<u>CONTENTS</u>
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Plan/PLAT	17	Driveways, Guardrail, Sidewalks, R/W marker post
Plan/PLAT	18	Trees, Bushline, Orchard, Pine trees, Ornamental shrubs
Plan/PLAT	19	Stream line, Swamp, Ditch lines
Plan	20	
Plan/PLAT	21	Existing underground: Underground utilities - water, sewer, telephone, electrical, CATV Telephone pedestal Gas valve Drain tiles Caution symbol O.H. electric Transmission line
Plan/PLAT	22	Horizontal alignment: Proposed alignments Channel change Curve data Equation arrows North arrows Bearings Relocated P.E. centerline

<u>PLOT USE</u>	<u>LEVEL</u>	<u>CONTENTS</u>	<u>PLOT USE</u>	<u>LEVEL</u>	<u>CONTENTS</u>
Plan/PLAT	23	Existing land description: Existing R/W and Z's Existing easements Property lines Property owners State boundary line County boundary line Corporate limits and annotation Corporate name Road names Lot/Outlot lines & numbering & Z's Subdivision naming Property pin, Monuments Cemetery text Mileage to nearest town	PLAT	27	R/W miscellaneous: Blow-up boundaries or identical points and contents R/W BEGIN/END notes and coordinate ties Parcel numbers Exist. R/W source notes T.I., P.L.E. & R.D.E. description Access control Land lines - section, 1/4, 1/16, town & range lines with Z's and pluses Section / 1/4 corner symbols 1/4 - 1/4 identification Civil Town names Distance between new r/w & bldgs. Road to be discontinued by town board action note Land tie details
PLAT	24	Feature items for agents: Encroaching buildings Sign block & hexagon Applicable signs Compensable utility poles & Transmission tower Septic vent	Plan/PLAT	28	Large structures and Point table: Bridge - Rural (shell) Culvert pipes $\geq 42"$ Cattle passes R/W point information table
Plan/PLAT	25	R/W required: New R/W line work Slope intercepts Match line T.I. & P.L.E. line work R/W monuments	Plan	29	
			Plan	30	
			Plan	31	
PLAT	26	Utility Plan deletions: Parcel cross-hatching R/W metes & bounds T.I., P.L.E., & R.D.E. pattern & description letter designation R/W point leader line w/sta. & dist. R/W point numbers			

<u>PLOT USE</u>	<u>LEVEL</u>	<u>CONTENTS</u>
Plan	32	
Plan	33	
Plan	34	
Plan	35	
Plan	36	
Plan	37	
Plan	38	
Plan	39	
	40	
Plan	41	
	42	
Plan	43	
Plan	44	
	45	
	46	
	47	
Plan	48	
	49	
Plan	50	
	51	
Plan-Traffic	52	

<u>PLOT USE</u>	<u>LEVEL</u>	<u>CONTENTS</u>
Plan-Traffic	53	
Plan-Traffic	54	
Plan-Traffic	55	
	56	
Plan	57	
PLAT	58	Plat sheet limits (cutouts)
Plan/PLAT	59	Master sheet cells: Title, detail and profile sheets as noted in cell library
Plan/PLAT	60	Master sheet cells: R/W base and profile grid- plot as noted in cell library
Plan	61	
	62	
	63	

NOTES

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

GOVERNMENTAL LAND LINE AND REFERENCE LINE ARE NOT COINCIDENTAL.

DISTANCES FROM REFERENCE LINE ARE $\overleftrightarrow{XX'}$ $\frac{R}{}$

DISTANCES FROM GOVERNMENTAL LAND LINE ARE $\overleftrightarrow{XX'}$ $\frac{G}{}$ OR $XX' G$

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE AS SPECIFIED ON EACH PLAT DETAIL SHEET :

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, COUNTY. ALL PLAT DISTANCES ARE GROUND LENGTH.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER "SURVEYS OF PUBLIC RECORDS".

CONVENTIONAL SIGNS AND ABBREVIATIONS

STATE LINE	---	SECTION CORNER		FOUNDATION OR RUIN	
COUNTY LINE	---			BUILDING	
TOWNSHIP AND RANGE LINES	---			CEMETERY	
SECTION LINE	---	NOTATION FOR COMBUSTIBLE FLUIDS		R/W MONUMENT	●
QUARTER LINE	---			NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	---	NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES		IRON PIN	
NEW REFERENCE LINE				VALVE	
NEW R/W LINE	---			WINDMILL	
EXISTING R/W LINE	---	BRIDGE		MANHOLE, SEPTIC VENT, WELL, ETC.	
PROPERTY LINE	---	STREAM OR RIVER		GAS PUMPS	
CORPORATE LIMITS	--- P.L. ---	LAKE		BUSHES	
LOT, TIE AND OTHER MINOR LINES	--- NAME ---	CULVERT (Box, Pipe or Cattle Pass)		TREES (Deciduous)	
SLOPE INTERCEPTS	--- SLOPE INTERCEPTS ---			TREES (Coniferous)	
UNDERGROUND FACILITY (Communications, Electric, Etc.)	--- C (Type) ---	SIGN	/ SIGN	WOODS	
FENCE	--- x --- x ---			ENCROACHING SIGN	
TEMPORARY INTEREST					
EASEMENT (Highway, Permanent Limited or Restricted Development)	///				
BEAM GUARD	---				
TRANSMISSION STRUCTURES (Line Optional)					
RAIL LINE					

CHECK SHEET FOR TITLE SHEET
(Real Estate)

CHECKED BY _____ DATE _____ PROJECT I.D. # _____

PROJECT CHARGE # _____

Major Title Block:

_____ Sheet Number (200 g.)
_____ Total Sheets (200 g.)
_____ R/W Project Number (200 g.)
_____ Federal Project Number (200 g.)
_____ Project Title (name), (200 g.)
_____ Project Subtitle (name), (140 g.)
_____ Highway Involved and County (140 g.)

Location Sketch:

_____ Label all County, State and Federal highways, rail lines, and water courses that are shown on latest County map
_____ Label all Town roads intersecting project limits
_____ Label and show latest pertinent corporate limits of all cities and villages
_____ Township and range designations with demarcation lines extended beyond map limits (140 g.)
_____ Label town names
_____ Standard grid north arrow (regular north arrow seldom used)
_____ Solid line 0.5cm or 1/5" wide for project; dashed line for remainder of route
_____ Begin and end relocation order (200 g.) with land ties (140 g.)
_____ Layout notation and scale
_____ Total net length of centerline to thousandths (120 g.)

Conventional Signs and Abbreviations: (For graphic information, see Dennis Dreier or Clyde Clark.) – (Abbreviations are unique to each plat).

_____ Notes: (For graphic information, see Dennis Dreier or Clyde Clark.)

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

GOVERNMENTAL LAND LINE AND REFERENCE LINE ARE NOT COINCIDENTAL.

When

DISTANCES FROM REFERENCE LINE ARE “ $\overleftarrow{\text{XX}}$ ”
R

Applicable

DISTANCES FROM GOVERNMENTAL LAND LINE ARE “ $\overleftarrow{\text{XX}}$ ” or “ XX'G ”
G

CHECK SHEET FOR TITLE SHEET - CONTINUED
(Real Estate)

EXISTING HIGHWAY RIGHT OF WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE AS SPECIFIED ON EACH PLAT DETAIL SHEET: (For available options, see District One Design Section Policy Statement for R.E. Plats). _____

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, _____ COUNTY. ALL PLAT DISTANCES ARE GROUND LENGTH.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER "SURVEYS OF PUBLIC RECORDS."

_____ Schedule of Lands and Interests Required: (When inclusion on title sheet is warranted.) (For graphic information, see Dennis Dreier or Clyde Clark.)

_____ Parcel Number(s) - Leave every 5th # empty for additions.

_____ Sheet Number(s)

_____ Owner(s)

_____ Interest Required

_____ Total Acres or S.F.

_____ R/W Acres Required or S.F.

_____ New

_____ Existing

_____ Total

_____ Total Acres or S.F. Rem.

_____ T.I. & P.L.E. Acres or S.F.

_____ R.D.E. Acres or S.F. (when necessary)

_____ Note concerning acreage: (For graphic information, see Dennis Dreier or Clyde Clark.)

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER, WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

_____ Signature Block

_____ Revision date followed by N.C. when applicable (100 g.)

PLEASE USE THE EXAMPLE PLATS FURNISHED BY DISTRICT ONE FOR ALL GRAPHIC REPRESENTATION, LINE WORK AND TEXT. (Any graphic questions and concerns should be directed to Dennis Dreier or Clyde Clark.)

CHECK SHEET FOR
SCHEDULE OF LANDS AND INTERESTS REQUIRED
(Real Estate)

CHECKED BY _____ DATE _____ PROJECT I.D. # _____

PROJECT CHARGE # _____

Title Block:

_____ Sheet Number (200 g.)
_____ Leave room for construction number under page number, per example plat
_____ R/W Project Number (200 g.)
_____ Federal Project Number (200 g.)
_____ Highway involved and County (140 g.)
_____ Date (140 g.)
_____ Revision date followed by N.C. when applicable (100 g.)

_____ Schedule of Lands and Interest Required: (For graphic information, see Dennis Dreier or Clyde Clark.)

_____ Parcel Number(s) - Leave every 5th # empty for additions
_____ Sheet Number(s)
_____ Owner(s)
_____ Interest Required
_____ Total Acres or S.F.
_____ R/W Acres Required or S.F.

_____ New
_____ Existing
_____ Total

_____ Total Acres or S.F. Rem.
_____ T.I. & P.L.E. Acres or S.F.
_____ R.D.E. Acres or S.F. (when necessary)

_____ Note concerning acreage: (For graphic information, see Dennis Dreier or Clyde Clark.)

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER, WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

PLEASE USE THE EXAMPLE PLATS FURNISHED BY DISTRICT ONE FOR ALL GRAPHIC REPRESENTATION, LINE WORK AND TEXT. (Any graphic questions and concerns should be directed to Dennis Dreier or Clyde Clark.)

CHECK SHEET FOR LAYOUT
SHOWING PROPERTY BOUNDARIES AND ACREAGE
(Real Estate)

CHECKED BY _____ DATE _____ PROJECT I.D. # _____

PROJECT CHARGE # _____

Title Block:

_____ Sheet Number (200 g.)
_____ Leave room for construction number under page number, per example plat
_____ R/W Project Number (200 g.)
_____ Federal Project Number (200 g.)
_____ Highway involved and County (140 g.)
_____ Not to scale (140 g.)
_____ Date
_____ Revision date followed by N.C. when applicable (100 g.)

Layout:

_____ Section lines, township lines, range lines and property lines
_____ Highways, public roads, railroads, lakes, rivers, ponds and streams
_____ Corporate limits
_____ Section numbers (350 g.)
_____ Town names across layout (200 g.) and along town border (140 g.)
_____ Label all highways and public roads (100 g.)
_____ Label all cities, towns and villages (200 g.)
_____ Label all lakes, rivers, ponds, streams and railroads (100 g.)
_____ Township and range designation (100 g.)
_____ Parcel Numbers (140 g.) - Leave every 5th # empty for additions
_____ Standard grid north arrow (regular north arrow seldom used)
_____ Alignments used with stationing every 5000 feet and side road designations labeled (100 g.)
_____ Begin relocation order with sta. (140 g.)
_____ End relocation order with sta. (140 g.)

NOTES:

- 1) Small parcels need to be exaggerated in size for display purposes.
- 2) Parcels in urban areas need not be shown.
- 3) All text should be read vertical from either right or left with perpendicular to bottom border being the base line. (Excluding proper section information, which always reads north.)

PLEASE USE THE EXAMPLE PLATS FURNISHED BY DISTRICT ONE FOR ALL GRAPHIC REPRESENTATION, LINE WORK AND TEXT. (Any graphic questions and concerns should be directed to Dennis Dreier or Clyde Clark.)

CHECK SHEET FOR DETAIL SHEET(S)
(Real Estate)

CHECKED BY _____ DATE _____ PROJECT I.D. # _____
PROJECT CHARGE # _____

Title Block:

_____ Sheet Number (200 g.)
_____ Leave room for construction number under page number, per example plat
_____ R/W Project Number (200 g.)
_____ Federal Project Number (200 g.)
_____ Highway involved and County (140 g.)
_____ Scale (120 g.)
_____ Grid factor (140 g.) N/A – not applicable
_____ Date (140 g.)
_____ Revision date followed by N.C. when applicable (100 g.)

Detail Sheet(s):

_____ Correct and check computer curve print-out information using odd-even rounding method
_____ Horizontal alignment with station ticks every 100 feet
_____ Station horizontal alignment every 500 feet (100 g.)
_____ Denote all equations, with symbol, on mainline only (140 g.)
_____ Tangent bearings (100 g.)
_____ Curve notes (coordinates on mainline P.I.'s only) (140 g.)
_____ Existing highway right of way, railroad property lines and pedestrian/bike trails.
_____ Property lines
_____ Governmental land lines
_____ Match lines (with station and see sheet 4.x) when land line or P.L. is unavailable, per example plat
_____ Standard grid north (regular north arrow seldom used)

END OF STAGE ONE

Property Ready for Title Search Information:

_____ At least two recovered U.S. Public Land Survey Corners per sheet with monument description and coordinates.
_____ Direction information (mile) to nearest city or village on first and last sheets (100 g.)
_____ Dimensions for existing highway R/W, railroads, and pedestrian/bike trails (100g.).
_____ Governmental 1/4 - 1/4's and lots (200g).
_____ P.L. text and land line stationing when necessary (100 g.)
_____ Show existing easements with proper dimensions denoted (100 g.)
_____ Label corporate limits and subdivisions
_____ Label civil towns on each detail sheet (200 g.) and along town border (140 g.)
_____ Label and number lots and outlots (100 g.) and blocks (140 g.)
_____ Label all highways, public roads, cities, villages, lakes, rivers and streams (with flow direction shown) and ponds when possible (100 g.)
_____ Applicable property owners (100 g.)

END OF STAGE TWO

CHECK SHEET FOR DETAIL SHEET(S) - CONTINUED
(Real Estate)

- _____ Label buildings, wells, iron pins and other select topography (100 g.)
- _____ Distance from new right of way to nearest building in group within 50 feet (100 g.)
- _____ Show channel change
- _____ Parcel numbers - leave every 5th # empty for additions (140 g.)
- _____ New right of way with monument, station and out at every break or jog denoting bearing change (do not jog R/W on unmonumented P.L.) (100 g.)

END OF STAGE THREE

- _____ Bearing and distance from recovered U.S. Public Land Survey Corner to new R/W or held existing R/W, and from there to R/W reference line or tangent if curve is intersected (100g.).
- _____ Metes and bounds dimensions and bearings along new and held R/W as well as to, from and around all easements (100 g.)
- _____ Road closed
- _____ Compensable utility poles and pedestals (solid)
- _____ Change utility easements to proper format and label accordingly (100g.).
- _____ Show all new bridges and large pipes (42" and over)
- _____ Heavily outline buildings to be moved or acquired
- _____ Crosshatch right of way (no repeats of pattern per sheet)

END OF STAGE FOUR

- _____ Slope intercepts with label (100 g.)
- _____ Label underground utilities and show owners (100 g.)
- _____ Signs between new or held R/W shall be identified by an alpha-numeric character within a hexagon (100 g. - wt. #1), with sign owner names provided in a small table (100 g. - wt. #1). (Table cell provided by District on request.) (See 3-1-91 explanation and example from Chief R.J.S.)
- _____ Access control
- _____ Show source note for existing highway right of way (how established) (140 g.)
- _____ Begin relocation order with stationing (200 g.) & coordinates (140 g.)
- _____ Tie to previous project when applicable or possible
- _____ End relocation order with stationing (200 g.) & coordinates (140 g.)
- _____ Tie to previous project when applicable or possible

END OF STAGE FIVE

NOTES:

CADD SHEETS - LEVELS MUST BE PROPERLY SHOWN AT LEFT SHEET BORDER.

CADD SHEETS - ALL SHEETS MUST BE LEVEL PERFECT.

PLEASE USE EXAMPLE PLATS "5680-02-21, 1200-03-21, & 1693-03-00" FURNISHED BY DISTRICT ONE FOR ALL GRAPHIC REPRESENTATION, LINE WORK AND TEXT. (Any graphic questions and concerns should be directed to Dennis Dreier or Clyde Clark.)

Special Provisions For Consultant Contracts (Excerpt)

PLATS

- 1) The CONSULTANT shall prepare Right-of-Way Plats as defined in the FDM and the DEPARTMENT's District One Right-of-Way Plat guide dated September 16, 2002.
- 2) Prior to start of the plat the CONSULTANT shall set up a meeting with the Right of Way Plat Unit to review the Special Provisions, FDM procedures, and the District 1 Right of Way Plat Guide.
- 3) In order to develop the right of way plat the consultant is to obtain 60-year ownership reports on each parcel. (See also J.2a). One copy of each report is to be delivered to the Department along with the right of way plat. These reports are to contain at a minimum the following items:
 - a. Names and addresses of all present owners together with a copy of the last conveyance (deed or land contract), which conveys title to the present owner. Also provide copies of the following:
 - Final Judgments
 - Active mortgages
 - Liens and recording data
 - All easements of record (Including those that go beyond 60 years)
 - b. Subdivision Plats, Certified Survey Maps as applicable, and any other encumbrances of record.
 - c. If the parcel description contains a referenced deed, a copy of that deed should also be submitted. If a parcel description contains or refers to a certified map or subdivision a copy of it shall be included in the report.
 - d. Copies of the latest real estate tax statement, and plat or tax maps affecting any of the properties searched.
 - e. Complete description of all land in the conveyance quoted which includes the parcel searched, with recording data, revenue stamps or transfer fee, and acreage if available or easily computed.
 - f. Delinquent real estate taxes, State and Federal Tax Liens, future special assessments, liens, and judgments.

- f. Full search of title is required on only the land abutting the highway, which is being purchased by the Department. All other contiguous ownership shall be shown with tax maps and descriptions listing acreage and assessed values.
 - g. The project I.D. and parcel number shall be on each report.
- 4) Right of way descriptions shall be provided for all individual parcels of land to be acquired as Right of Way for the PROJECT. Descriptions shall be by metes and bounds in accordance with the provisions as set forth in the MANUAL, or in the case of platted property by suitable reference to the platted data. For all unplatted property the descriptions shall be referenced to and tied into the pertinent section or quarter section corners.
- 5) The CONSULTANT shall prepare the Descriptions in line item format using IBM compatible PC- MS Word 7.0 software and provide a copy of this diskette to the DEPARTMENT.
- 6) The CONSULTANT shall provide one survey effort to field locate and temporarily mark the new right-of-way boundaries. The purpose of right-of-way (R/W) staking is to enable Property Owners, Appraisers and Negotiators to assess the affects of the highway project. A marker is needed at each point where the R/W line changes direction plus a marker on or near each property line. Also, in areas with landscaping, buildings and /or other improvements, additional stakes may be necessary so that it is readily determined what - items are being affected. Place R/W lath showing new R/W line, TI's, PLE's RDE'S etc. using the following guidelines:
 - a. Write the stationing on one side of the lath.
 - b. Write R/W (TI, PLE, RDE, etc.) and the centerline offset on the other side of the lath.
 - c. Color code each lath with paint and ribbon as follows:
 - New R/W - Orange, red or pink
 - Easements (TI, PLE, RDE) – Blue
 - d. But a nail, flag and or paint where lath cannot be placed or will not stay.
 - e. Aim a marker at that point.
 - f. Put intermediates intervisible - all points should have another point visible (especially in front yards and improved areas)
 - g. Stationing should be facing down line, not toward the road, for pictures.
 - h. Existing R/W need not be staked except in areas where the new R/W starts or ends and where needed and ask for specifically. Please coordinate your staking activities with the District Real Estate Section. The Real Estate Section needs at least two weeks lead time to send letters to the property owners. If you see property owners, please be courteous, introduce yourself and let them know what you are doing. Also have names and phone numbers of Real Estate agents available if a property owner needs additional information.
- 7) The CONSULTANT shall provide the DEPARTMENT with hard copy, one full-size and three half-size prints of the plat with right-of-way points and TI's numbered, using no duplicated numbers- a hard copy of all points in ground (N, E) coordinates; and a electronic disk containing the same information in AASHTO SDMS format prior to PS&E.

- 8) The CONSULTANT shall provide a full size of the draft plat to the D-1 utility coordinator for review after all existing information, including utility facility locations, has been added by _____.
- 9) The CONSULTANT shall provide a full size copy of the final plat to the D-1 utility coordinator and a half size copy to the Right of Way Plat Unit for review just prior to initial plat submittal.

CADDS

The Computer Aided Design Drafting System services which is a part of this CONTRACT, shall at all times be subject to the review and approval of the DEPARTMENT, shall be under the direction of the appropriate CADDS representatives, and shall be in accord with all requirements of the DEPARTMENT, including those contained in the DEPARTMENT'S Facilities Development Manual and applicable professional standards.

Prior to any services under this CONTRACT, a dialogue shall take place between the CONSULTANT representative and the appropriate CADDS representative to discuss and review applicable drafting forms and standards, and sample graphics handouts.

The forms and standards shall be as defined in the Facilities Development Manual and the Transportation District One Right of Way Plat Guide dated September 16, 2002, and all subsequent revisions, and supplemented with the following requirements. The District policy statement will be provided to the CONSULTANT.

Additional plat/plan and methodology requirements are as follows:

- 1) CADDS generated paper/film plots of plat/plan sheets shall depict existing topographic features as shown on CADDS levels 11 - 19. Level 16 may be required as an existing feature for select urban plats. Plat design and acquisition information shall be depicted utilizing CADDS levels 21-28 and 59. For plan design requirements, see plan CADDS representative.
- 2) Existing features shall be depicted per example plats and plans. Design and acquisition information shall be solid lines.
- 3) Prior to the RPC/PS&E date, the CONSULTANT shall submit individual half-size paper plots of plat/plan sheets at 30%, 60%, and 90% stages of completion. The applicable levels shall appear at the left margin, per examples, in order to confirm proper levelization and depiction.
- 4) Final film copy of R/W plats shall be provided to the DEPARTMENT at the time of PS&E, or at the direction of the CADDS plat representative.

- 5) The final film copy of right of way plats **must not** be electro statically prepared. It must be DEPARTMENT approved first generation, double matte, reverse, high contrast film.
- 6) All electronically prepared plat and plan sheets must be formatted into individual sheet files before final check plots are made for the DEPARTMENT.
 - a. Each completed electronic right of way plat sheet shall be a stand-alone sheet with **no** reference files attached. Each sheet must be level perfect and coordinate integrity must be maintained.
- 7) All plat sheets must be dated using a DEPARTMENT supplied date prior to final transmittal to the DEPARTMENT.
- 8) Plat and plan sheet files must not be rotated. The integrity of the grid plane orientation and subsequent coordinate values must be maintained for future revisions on CADDs.
- 9) Electronic plats and plans shall be prepared CADDs level perfect. In this way, future electronic revisions can be made and there will be confidence in the integrity of data levels. At the direction of the appropriate DEPARTMENT CADDs representative, the CONSULTANT shall provide the DEPARTMENT with plat or plan sheet files loaded to a CD-ROM. The DEPARTMENT will perform a random level check prior to accepting the sheets as being complete. If there is more than 5% error in data leveling, the CONSULTANT must check each file, make corrections, and resubmit to the DEPARTMENT for another check. If corrections need to be made by the CONSULTANT, a new set of original hard copies must be provided to the DEPARTMENT.
- 10) Electronically prepared contract items must be submitted to the DEPARTMENT on a DEPARTMENT approved electronic media in .DGN format.
- 11) All mapping must be obtained directly from the DEPARTMENT district office.
- 12) Adhesive backed products are not to be used on the final hard copy submitted to the DEPARTMENT.
- 13) Leave every 5th parcel blank on the Schedule of Lands & Interests Required as shown on the DEPARTMENT example plat.

SERVICES TO BE PROVIDED BY THE DEPARTMENT

The DEPARTMENT agrees to:

- 1) The DEPARTMENT will provide to the CONSULTANT sample projects that depict current standards and practices as required by District One.
- 2) The DEPARTMENT will provide to the CONSULTANT a 'CADD Information Chart for Levels and Lines'. This chart shows line symbolism, line weights, text sizes, and other information that shall be used to prepare plat and plan sheets.
- 3) The DEPARTMENT will provide to the CONSULTANT a 'CADD Data Levels' chart showing the breakdown of levels and the data assigned to each. The CONSULTANT prior to DEPARTMENT acceptance must correctly place all data.
- 4) The DEPARTMENT will provide to the CONSULTANT a 'Check List' for individual plat sheets. This is an in-depth, sheet-by-sheet graphic aid checklist that shall be used by the CONSULTANT in preparing the plat.
- 5) The DEPARTMENT will provide to the CONSULTANT a Relocation Order Revision Form (RORF) sample. This documents parcel-specific information changes, which are made to the plat at the time a dated revision is made. The RORF shows a brief, yet complete written account of applicable changes made to a plat since the last dated copy. The CONSULTANT shall discuss with the DEPARTMENT Technical Service section, R/W Support Unit representative, if this item is required.
- 6) The DEPARTMENT will provide to the CONSULTANT a policy statement dated March 1, 1991 and prepared by Robert J. Stone, P.E. depicting graphics and stating District procedures for dealing with advertising signs.
- 7) The DEPARTMENT will provide the CONSULTANT with:
 - a. Design information for CADD efforts.
 - b. CADDs electronic media in .DGN format with DEPARTMENT, project specific computer graphics data.

REVISION OF COMPLETED PLANS/PLATS

Section V. B. of the Standard Provisions shall be amended as follows:

The CONSULTANT shall make such revisions in plats or plans which have been completed, approved, and accepted by the DEPARTMENT as are necessary to correct errors in the plats or plans made by the CONSULTANT, when required to do so by the DEPARTMENT without compensation thereof from the DEPARTMENT.

Should the DEPARTMENT find it desirable for its own purposes to have previously satisfactorily completed and accepted plats or plans or parts thereof revised, the CONSULTANT shall make such revisions if requested and as directed by the DEPARTMENT. Such service shall be considered 'Extra Work'.

ADDITIONAL SERVICES PROVIDED BY THE DEPARTMENT

The DEPARTMENT will provide to the CONSULTANT the following for the PROJECT:

- 1) Approved Memorandum of Understanding
- 2) Traffic Projections and Count.
- 3) As-built plans, as may be available
- 4) Existing right of way plat and drawings, as may be available.
- 5) Accident reports/data as may be available.
- 6) Planimetric Mapping and Digital Terrain Model
- 7) Horizontal and Vertical Control survey data.
- 8) Subsurface Soils Investigation.
- 9) Pavement Type Selection Report.

EXAMPLE PLATS

The attached plats provided are intended to be used as a guide for graphic representation, and to be utilized in your preparation of plats. Because of recent changes involved in the display of R/W monumentation and utility easements, we are unable to provide you with an all inclusive example plat. For this we apologize. District One expects complete adherence to the examples and guidelines provided in the R/W Plat Guide!

Example Plats 1693-03-00, 5680-02-21 and 1200-03-21 do not reflect our current policy of monumenting all permanent interests (easements), as does 5593-00-21.

Example Plats 5680-02-21 and 1200-03-21 do not reflect our current policy of numbering R/W monuments in a diagonal fashion with accompanying R/W point number and coordinate table.

Example Plat 1200-03-21 does not reflect our current policy on numbering R/W Plat sheets. The title sheet should start with 4.1 as depicted on the other examples.

Prior to starting any R/W plat you should have requested a Compact Disk containing all of our Current Drafting Standards (Cell Libraries, Line Styles, etc.).

PLEASE contact Dennis Dreier at (608)246-5352 or Clyde Clark at (608)246-7905 for your R/W PLAT DRAFTING questions or concerns.

Links to Example Plats

[1693-03-00](#)

[5680-02-21](#)

[1200-03-21](#)